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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/575,366 | 04/11/2006 | Keiji Shigesada | Q93602 | 9057 |
| 23373 7590 04/07/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | | |
| EXAMINER | | | | |
| KURTZ, BENJAMIN M | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1797 | | | | |
| NOTIFICATION DATE | | DELIVERY MODE | | |
| 04/07/2010 | | ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/575,366

Applicant(s)

SHIGESADA ET AL.

Examiner

BENJAMIN KURTZ

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1, 4 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gianos et al. US 4 014 653.**

Claims 1 and 4, Gianos teaches a porous membrane cartridge comprising: a cylindrical barrel (18) having openings at a top end and a rear end, respectively, a cap (10) formed into a cylindrical shape having a fit-in portion fitted outside the top end, abutting with an opening edge of the top end, and having a sandwiching face sandwiching a porous membrane (16) between itself and the barrel, and the porous membrane sandwiched between the opening edge of the barrel and the cap, wherein

the cap is fixed to the barrel so as not to be pulled out of the barrel in a state of crushing a peripheral edge of the porous membrane and sandwiching the porous membrane between itself and the cap, wherein a diameter of an inner end of the opening edge matches a diameter of an end at an inner perimeter side of the sandwiching face, wherein in addition the opening edge of the barrel is formed to a taper where an inner perimeter side is more retreated than an outer perimeter side, and the taper is formed with continuing into a flat portion formed at an outmost portion of the opening edge (fig. 4, col. 2, lines 25-30). The recitation of the opening edge of the barrel and the sandwiching face of the cap being welded by ultrasonic welding with a pressing force between 75N and 200N is a process limitation and renders the claim a product by process claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 227 USDQ 964 (1985). The process of joining the barrel and cap of Gianos is deemed a structural alternative to the welding process recited herein. The recitation of the cartridge being for extracting a nucleic acid is an intended use that does not further structurally limit the apparatus.

Claim 10, Gianos teaches a porous membrane cartridge comprising: a cylindrical barrel (18) having openings at a top end and a rear end, respectively, a cap (10) formed into a cylindrical shape having a fit-in portion fitted outside the top end,

abutting with an opening edge of the top end, and having a sandwiching face sandwiching a porous membrane (16) between itself and the barrel, and the porous membrane sandwiched between the opening edge of the barrel and the cap, wherein the cap is fixed to the barrel so as not to be pulled out of the barrel in a state of crushing a peripheral edge of the porous membrane and sandwiching the porous membrane between itself and the cap, wherein a diameter of an inner end of the opening edge matches a diameter of an end at an inner perimeter side of the sandwiching face, (fig. 1-4, col. 2, lines 25-30). The recitation of after the cap and the porous membrane are inserted in a cavity of an injection molding mold, a shape of a portion of the barrel is molded by injection molding material in the cavity is a process limitation and renders the claim a product by process claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 227 USDQ 964 (1985). The process of making the barrel of Gianos is deemed a structural alternative to the injection molding process recited herein. The recitation of the cartridge being for extracting a nucleic acid is an intended use that does not further structurally limit the apparatus.

Response to Arguments

2. Applicant's arguments filed 2/9/10 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., preventing a discharge liquid from being contaminated by a liquid going around the side portion of the porous membrane and can maintain the sandwiched state even in the case of a temperature change and a humidity change) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN KURTZ whose telephone number is (571)272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin Kurtz
Examiner
Art Unit 1797

/Benjamin Kurtz/
Examiner, Art Unit 1797